## Cetraria islandica in Sussex County, N.J.

A large and robust colony of the Iceland Moss lichen, Cetraria islandica, perhaps the only one now existing in the State of New Jersey, was found by members of the Torrey Botanical Club on Oct. 12, 1937, on the slanting ledges of High Falls sandstone on the west side of a ridge, east of the road from Montague to Port Jervis, in the town of Montague, Sussex County, N. J. This ledge is a conspicuous feature of the ridge as the forest cover appears to have slid off for an extent of several acres. It is made more conspicuous from the road along the east bank of the Delaware by the large white painted sign of Rock View Inn, east of the slide. Glacial striae, pointing southwest, and probably protected by forest soil until it slid off, are frequent on the rock surface.

The Cetraria islandica is found growing mixed with Cladonia uncialis, sylvatica and rangiferina, and with grasses, other herbaceous plants, and low shrubs, along lines of weakness in the rock due to joint cracks. It is as tall, up to three inches high, as I have seen it in our range, or on Adirondack and New England summits. It occurs scatteringly in the range of the Torrey Botanical Club: in occasional small colonies in undisturbed soil in western Suffolk County, Long Island, and plentifully on the Shinnecock Hills and in some places on Montauk Point, and at East Marion on Orient Point. It has not been reported south of the New Jersey Highlands. Tuckerman cites it at Delaware Water Gap, reported by Austin, who collected all over north Jersey 75 years ago, but does not say whether it was on the New Jersey or Pennsylvania sides. I have rambled over Mount Tammany and other mountains in the New Jersey side, of the Water Gap, but have not seen it, nor have I seen it anywhere in suitable places along Kittatinny Mountain, from Water Gap to High Point. It occurs, in stunted forms, on the Shawangunk Mountain, at Sam's Point, High Point, and Gertrude's Nose; and in small quantity, near the highest points on Schunemunk Mountain, in Orange County. There is one good sized colony in the Harriman Section of the Palisades Interstate Park, on the Lichen Trail, on the northwest corner of Hogencamp Mountain, overlooking Island Pond. I have not seen it elsewhere on summits of the Hudson Highlands. It has been collected southward on the higher Appalachian Mountains, to North Carolina. John W. Thomson, Jr., of the Department of Botany, University of Wisconsin, sent me some last summer from the vicinity of Pennsylvania State College, in the Allegheny Plateau.

The Montague, N. J., colony is the most ample and robust one I know in the Club range, with the sole exception of that on Shinnecock Hills, L. I. Its survival is possibly due to the fact that it is protected from forest fires, the clumps growing on the open ledge which a fire in the surrounding hardwoods could not reach. It was probably once more plentiful in the Club range, but was killed by ground fires, except in spots where open ledges, or beach or dune sands prevented fires from spreading. The colonies on Shinnecock Hills have been reduced in recent years by fires in grass mixed with the lichens.

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